



When product integrity counts...

Manufacturers of laboratory calibrated temperature and humidity data loggers, real-time monitoring and cold chain solutions

## Accuracy vs Resolution

There is often confusion between accuracy and resolution in monitoring devices. While related, they describe different aspects of measurement.

### Accuracy

- Accuracy refers to how close a recorded temperature is to the true temperature. It represents the possible margin of error in a measurement.  
The Temprecord logger has an accuracy of approximately  $\pm 0.2^{\circ}\text{C}$  ( $\pm 0.35^{\circ}\text{F}$ ) across its measurement range.

### Resolution

- Resolution refers to the level of detail a measurement is recorded and displayed to, typically shown by the number of decimal places.  
The resolution of the Temprecord logger varies with temperature, but at  $0^{\circ}\text{C}$  it is approximately  $0.01^{\circ}\text{C}$  (one hundredth of a degree). The displayed resolution in Temprecord software is usually  $0.01^{\circ}\text{C}$ .

Although the resolution is finer than the accuracy, this is intentional. A higher resolution allows the logger to detect and display small temperature fluctuations, even if those changes fall within the accuracy tolerance. This provides more detailed insight compared to other loggers, which may have resolutions as low as  $2.0^{\circ}\text{C}$ .

### Humidity Measurements

- Humidity values are typically displayed with a resolution of  $0.01\%$  RH.  
The accuracy of humidity measurements depends on the specific logger model. Please refer to the relevant specification sheet for detailed accuracy information.